[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 14304 3/12/2001]

[Docket No. 99-CE-89-AD; Amendment 39-12137; AD 2001-05-01]

RIN 2120-AA64

Airworthiness Directives; DG Flugzeugbau GmbH Model DG-500MB Sailplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain DG Flugzeugbau GmbH (DG Flugzeugbau) Model DG-500MB sailplanes equipped with a SOLO 2625 02 engine. This AD requires you to install additional access holes in the propeller mount and modify the engine. This AD also requires you to do a ground test run and replace the digital engine indicator circuit breaker. This AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for the Federal Republic of Germany. The actions specified by this AD are intended to correct an inadequate circuit breaker and unsatisfactory drive belt tension that could cause damage to the engine crankshaft. Such damage could lead to engine failure and loss of control of the sailplane.

DATES: This AD becomes effective on April 27, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of April 27, 2001.

ADDRESSES: You may get the service information referenced in this AD from DG Flugzeugbau GmbH, Postbox 41 20, D-76646 Bruchsal, Federal Republic of Germany; telephone: +49 7257-890; facsimile: +49 7257-8922. You may examine this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 99-CE-89-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; facsimile: (816) 329-4090.

SUPPLEMENTARY INFORMATION:

Discussion

What events have caused this AD? The Luftfahrt-Bundesamt (LBA), which is the airworthiness authority for the Federal Republic of Germany, notified FAA that an unsafe condition may exist on all DG Flugzeugbau Model DG-500MB sailplanes equipped with a SOLO 2625 02 engine. The LBA reports that the service history for the SOLO 2625 02 engine shows a need to modify the front crank shaft bearing. Additionally, the digital engine indicator circuit breaker amperage is too low for use and needs replacement.

What are the consequences if the condition is not corrected? The actions specified by this AD are intended to correct an inadequate circuit breaker and unsatisfactory drive belt tension that could cause damage to the engine crankshaft. Such damage could lead to engine failure and loss of control of the sailplane.

Has FAA taken any action to this point? We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain DG Flugzeugbau Model DG-500MB sailplanes equipped with a SOLO 2625 02 engine. This proposal was published in the *Federal Register* as a notice of proposed rulemaking (NPRM) on December 27, 2000 (65 FR 81782). The NPRM proposed to require you install additional access holes in the propeller mount and modify the engine. The NPRM also proposed to require you to do a ground test run and replace the digital engine indicator circuit breaker.

Was the public invited to comment? Interested persons were afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

FAA's Determination

What is FAA's final determination on this issue? After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We determined that these minor corrections:

- will not change the meaning of the AD; and
- will not add any additional burden upon the public than was already proposed.

Cost Impact

How many sailplanes does this AD impact? We estimate that this AD affects 1 sailplane in the U.S. registry.

What is the cost impact of this AD on owners/operators of the affected sailplanes? We estimate the following costs to accomplish the modification:

Labor Cost	Parts Cost	Total Cost Per Sailplane	Total Cost on U.S. Operators
12 workhours X \$60 per hour = \$720.	The manufacturer will do the engine modification and provide the new circuit breaker under warranty.	\$720.	\$720 X 1 = \$720.

Regulatory Impact

Does this AD impact various entities? The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

Does this AD involve a significant rule or regulatory action? For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows: PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows: Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new AD to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service Washington, DC

U.S. Department of Transportation Federal Aviation Administration

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-05-01 DG FLUGZEUGBAU GMBH: Amendment 39-12137; Docket No. 99-CE-89-AD.

- (a) What sailplanes are affected by this AD? This AD affects Model DG-500MB sailplanes, all serial numbers equipped with a SOLO 2625 02 engine, that are certificated in any category.
- (b) Who must comply with this AD? Anyone who wishes to operate any of the above sailplanes must comply with this AD.
- (c) What problem does this AD address? The actions specified by this AD are intended to correct an inadequate circuit breaker and unsatisfactory drive belt tension that could cause damage to the engine crankshaft. Such damage could lead to engine failure and loss of control of the sailplane.
- (d) What actions must I accomplish to address this problem? To address this problem, you must accomplish the following:

Actions	Compliance	Procedures
(1) Remove the engine from the propeller mount.	Within the next 25 hours time-in-service (TIS) after April 27, 2001 (the effective date of this AD).	In accordance with the maintenance manual. Ship engine to the engine manufacturer, SOLO, or a licensed repair station, for modification according to the SOLO Technical Note (TN) 4600-1.
(2) Install additional access holes in the propeller mount.	Before further flight after removing the engine and before installing the modified engine to the propeller mount.	In accordance with drawing 5M102 of DG Flugzeugbau Technical Note 843/13, dated November 3, 1999.
(3) Install the modified engine to the propeller mount.	Before further flight after removing the engine and after the engine modification.	In accordance with the maintenance manual.
(4) Do a ground test run.	Before further flight after the previous action.	In accordance with DG Flugzeugbau Technical Note 843/13, dated November 3,

1999.

Actions	Compliance	Procedures
(5) Replace the digital engine indicator (DEI) circuit breaker with a new 5 ampere Klixon 7277-2-5A circuit breaker (or FAA-approved equivalent part number).	Before further flight after the previous actions.	In accordance with DG Flugzeugbau Technical Note 843/13, dated November 3, 1999.
(6) Do not install any engine that has not been modified following SOLO TN 4600-1.	As of April 27, 2001 (the effective date of this AD).	Not Applicable.
(7) Do not install any DEI circuit breaker that is not a 5 ampere Klixon 7277-2-5A circuit breaker (or FAA-approved equivalent part number).	As of April 27, 2001 (the effective date of this AD).	Not Applicable.

- (e) <u>Can I comply with this AD in any other way?</u> You may use an alternative method of compliance or adjust the compliance time if:
 - (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate.
- Note 1: This AD applies to each sailplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For sailplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.
- (f) Where can I get information about any already-approved alternative methods of compliance? Contact Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; facsimile: (816) 329-4090.
- (g) What if I need to fly the sailplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your sailplane to a location where you can accomplish the requirements of this AD.
- (h) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done in accordance with DG Flugzeugbau GmbH Technical Note No. 843/13, dated November 3, 1999. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from DG Flugzeugbau GmbH, Postbox 41 20, D-76646 Bruchsal, Federal Republic of Germany. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(i) When does this amendment become effective? This amendment becomes effective on April 27, 2001.

Note 2: The subject of this AD is addressed in German AD Number 1999-383, dated December 1, 1999.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on February 26, 2001. Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.